SEMESTER END EXAMINATION, MAY, 2025

Course Name: - BPO **Year:-** II Year

Paper Name: - Orthotics Science-II **Paper Code:-** BPO207

Time - 3 Hrs + 20 minutes per hour extra time for V.I. & examinees with writer. **Max Marks-70**

Instructions:

- The question paper consists of three sections namely A, B, C. All sections are compulsory.
- Section A- Each question carries **3 marks. All questions are compulsory.**
- Section B- Answer any **5 out of 7** given questions. Each question carries **7 marks.**
- Section C- Answer any **2 out of 3** given questions. Each question carries **10 marks.**

Section – A
Objective Questions

1. Answer all the following questions. 5x3 =15

i) Which of the following is the most common type of cerebral palsy?
   A. Ataxic
   B. Dyskinetic
   C. Spastic
   D. Hypotonic

ii) Which of the following is not a typical feature of osteoarthritis?
   A. Morning stiffness lasting more than 1 hour
   B. Joint space narrowing
   C. Osteophyte formation
   D. Subchondral sclerosis

iii) First-line treatment for osteoarthritis typically includes:
   A. Joint replacement surgery
   B. Corticosteroid injections
   C. Physical therapy and NSAIDs
   D. Antibiotic

iv) Poliomyelitis primarily affects which part of the nervous system?
   A. Cerebellum
   B. Posterior horn of spinal cord
   C. Anterior horn cells
   D. Autonomic ganglia

v) Which radiological feature is most commonly associated with osteoarthritis?
   A. Osteopenia
   B. Joint space widening
   C. Osteophyte formation
   D. Bone tumors

Section – B
Short Answer Questions

2. Answer any five of the following questions. 5x7=35

i. Differentiate between UMN and LMN.

ii. Discuss the different type of knee orthosis with their biomechanical control and clinical application.

iii. Write down the orthotic treatment algorithm of congenital dislocation of hip. 6

iv. Write in detail about the healing procedure of fracture. Also discuss in detail about the orthotic management of fracture of shaft of Tibia.

v. What is Cerebral palsy and classify its type? Discuss in detail about the possible clinical sign and orthotic management of any one type of CP. 7

vi. What is spina bifida describe different orthotic management algorithm for a patient with myelomeningocele.

vii. What is LCPD discuss the evidence based Orthotic management for a patient with LCPD disease. 6

Section - C
Descriptive Questions

3. Answer any two of the following question. 2x10=20 17

i) Write about the pathophysiology of the osteoarthritis with possible orthotic management and explain Orthoses the Biomechanics of any two type of Orthoses with neat sketch. 9

ii) Write down the lower Limb Orthotics Prescription Criteria with reference of any one deformity. 8

iii) Explain RGO/HGO with labelled diagram including their respective benefits and recommendation for use.

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